

Title (en)
COAXIAL DIELECTRIC ROD ANTENNA

Title (de)
KOAXIALE DIELEKTRISCHE STABANTENNE

Title (fr)
ANTENNE TIGE DIELECTRIQUE ET COAXIALE

Publication
EP 1249056 B1 20040128 (EN)

Application
EP 00980531 A 20001116

Priority
• US 0031759 W 20001116
• US 48216600 A 20000112

Abstract (en)
[origin: WO0152354A1] An antenna. The antenna (20) includes a first dielectric antenna rod having a first dielectric constant (epsilon 3). The first dielectric antenna rod (22) is coupled to a first frequency transmission source (27) for propagating first frequency band radiation from the first dielectric antenna rod into a medium having a medium dielectric constant (epsilon 1). A second dielectric antenna rod (24) is provided having a second dielectric constant (epsilon 2). The second dielectric antenna rod is coupled to a second frequency transmission source (28) for propagating second frequency band radiation from the second dielectric antenna rod into the medium. The first dielectric antenna rod is coaxially mounted within the second dielectric antenna rod. The first dielectric constant is greater than the second dielectric constant. The second dielectric constant is greater than the medium dielectric constant.

IPC 1-7
H01Q 13/24

IPC 8 full level
H01Q 1/40 (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/10** (2015.01); **H01Q 5/47** (2015.01); **H01Q 11/16** (2006.01); **H01Q 13/24** (2006.01); **H01Q 19/08** (2006.01); **H01Q 21/30** (2006.01)

CPC (source: EP US)
H01Q 1/40 (2013.01 - EP US); **H01Q 5/47** (2015.01 - EP US); **H01Q 13/24** (2013.01 - EP US); **H01Q 19/08** (2013.01 - EP US); **H01Q 21/30** (2013.01 - EP US)

Cited by
US9860075B1; US9948355B2; US10069535B2; US10148016B2; US10755542B2; US9722318B2; US10090606B2; US10326689B2; US10341142B2; US10340600B2; US10389029B2; US10777873B2; US10916863B2; US9628854B2; US9917341B2; US9954287B2; US10139820B2; US10679767B2; US10916969B2; US9755697B2; US9768833B2; US9794003B2; US9871282B2; US9876584B2; US9999038B2; US10009065B2; US10020587B2; US10291334B2; US9627768B2; US9742462B2; US9831912B2; US9954286B2; US9997819B2; US10135145B2; US10168695B2; US10359749B2; US10411356B2; US9615269B2; US9866309B2; US9887447B2; US9935703B2; US9973416B2; US9973940B1; US9998932B2; US10050697B2; US10264586B2; US10326494B2; US10446936B2; US9705610B2; US9820146B2; US9853342B2; US9876587B2; US9913139B2; US9947982B2; US10051629B2; US10225025B2; US10355367B2; US9893795B1; US9912027B2; US9948354B2; US10374316B2; US10530505B2; US10665942B2; US10819035B2; US9640850B2; US9653770B2; US9661505B2; US9674711B2; US9912033B2; US10009067B2; US10033107B2; US10069185B2; US10142086B2; US10320586B2; US10361489B2; US10784670B2; US9680670B2; US9712350B2; US9847566B2; US9866276B2; US9876605B1; US10136434B2; US10205231B1; US10243784B2; US10312567B2; US10468766B2; US10498044B2; US10581154B2; US11032819B2; US9608740B2; US9699785B2; US9788326B2; US9836957B2; US9906269B2; US10063280B2; US10194437B2; US10291311B2; US10305197B2; US10305179B2; US10424838B2; US10431898B2; US10553956B2; US10840602B2; US9628116B2; US9762289B2; US9929755B2; US9930668B2; US10051483B2; US10051630B2; US10091787B2; US10224634B2; US10340601B2; US10340603B2; US10547348B2; US10601494B2; US9685992B2; US9742521B2; US9749083B2; US9871283B2; US9882277B2; US9912419B1; US9967173B2; US10074886B2; US10079661B2; US10135147B2; US10144036B2; US10535928B2; US10727599B2; US10938108B2; US9729197B2; US9769020B2; US9793951B2; US9806818B2; US9871558B2; US9927517B1; US9948333B2; US9960808B2; US10033108B2; US10243270B2; US10637149B2; US10694379B2; US10811767B2; US9654173B2; US9692101B2; US9876570B2; US9876264B2; US9876571B2; US9882257B2; US9912381B2; US9912382B2; US9967002B2; US10020844B2; US10074890B2; US10096881B2; US10135146B2; US10154493B2; US10178445B2; US10230426B1; US10476550B2; US10650940B2; US10727901B2; US9667317B2; US9705571B2; US9735833B2; US9769128B2; US9780834B2; US9793955B2; US9800327B2; US9838078B2; US9911020B1; US10090594B2; US10103422B2; US10205655B2; US10224981B2; US10298293B2; US10340573B2; US10340983B2; US10382976B2; US10396887B2; US10439675B2; US10797781B2; US10812174B2; US9608692B2; US9787412B2; US9838896B1; US9847850B2; US9865911B2; US9882657B2; US9904535B2; US9973299B2; US9991580B2; US9998870B1; US10009063B2; US10009901B2; US10027398B2; US10027397B2; US10044409B2; US10090601B2; US10103801B2; US10142010B2; US10225842B2; US10305190B2; US10348391B2; US10349418B2; US10389037B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0152354 A1 20010719; WO 0152354 A9 20020516; WO 0152354 A9 20021205; AT E258721 T1 20040215; AU 1778401 A 20010724; DE 60008024 D1 20040304; EP 1249056 A1 20021016; EP 1249056 B1 20040128; JP 2003520476 A 20030702; US 6266025 B1 20010724

DOCDB simple family (application)
US 0031759 W 20001116; AT 00980531 T 20001116; AU 1778401 A 20001116; DE 60008024 T 20001116; EP 00980531 A 20001116; JP 2001552473 A 20001116; US 48216600 A 20000112